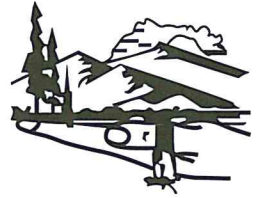




Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Mark Gordon, Governor

Todd Parfitt, Director

February 10, 2020

Mr. Carl Daly
Acting Director, Air and Radiation Division
U.S. EPA Region VIII
1595 Wynkoop St.
Denver, CO 80202

RE: Wyoming PM_{2.5} and PM₁₀ Data Influenced by an Exceptional Event: September 1-15, 2017

Dear Mr. Daly,

During the time frame of September 1, 2017 through September 15, 2017, multiple industrial, federal, and state-run monitors experienced exceedances of the 24-hour PM_{2.5} and PM₁₀ standards due to wildfire smoke across the western region of the United States. The Wyoming Air Quality Division (AQD) has flagged the affected data in exceedance of the National Ambient Air Quality Standards (NAAQS) measured by multiple monitors as due to an exceptional event under 40 CFR Part 50.14. The AQD is requesting EPA concurrence that the event was exceptional.

The AQD has assembled a group exceptional event documentation package and completed its review of supplemental materials submitted by the affected industrial and federal monitoring organizations. The AQD has determined that the group exceptional event package demonstrates a clear causal relationship between the exceedances measured at the PM_{2.5} and PM₁₀ monitors and the widespread wildfire smoke impacts observed across the state during this period.

The AQD sent an initial notification cover letter and forms to EPA for the September 2017 exceedances on June 10, 2019. The AQD received the EPA Initial Notification Response Letter via email on July 3, 2019. In the response EPA states they have not identified and do not anticipate these data being used in any pending EPA regulatory determination, to formulate or support regulation, guidance or in any other pending EPA decision, position or action and therefore does not plan to review this event for concurrence. The AQD is submitting this demonstration to EPA so that when the EPA prepares to use these data in any pending EPA regulatory determination, to formulate or support regulation, guidance or in any other pending EPA decision, position or action the demonstration will already be available in EPA's records for concurrence review.

Public notice for the intent to flag September 2017 PM_{2.5} and PM₁₀ data as due to a wildfire exceptional event was published in the following Wyoming newspapers on December 3, 2019: Casper Star Tribune, Cody Enterprise, Gillette News Record, Laramie Boomerang, Riverton Ranger, Sheridan Press, and Wyoming Tribune Eagle. The public notice was also published in the Jackson Hole News & Guide and Rock Springs Rocket Miner on December 4, 2019. The exceptional event documentation package was

made available for public comment and the public was allowed thirty (30) days to submit written comments. The documentation packet was made available on the AQD's website as well as at the AQD's Cheyenne office. At the close of business on January 2, 2020 the AQD had received no written comments from the public.

The AQD's review process for industrial exceedances includes several members from multiple Sections within the Division. In the case of these exceedances, AQD staff from the Compliance, Permitting and Monitoring Sections convened to determine if the exceedances qualified as exceptional events under 40 CFR Part 50.14. Each team member brings a unique skill set and perspective to the review process, resulting in a thorough evaluation, from multiple perspectives, of the information provided by the facilities.

Among the questions considered by the review team is the question of facility compliance with their air quality permits at the time of the exceedance. This is necessitated by the definition of an exceptional event, which excludes, "air pollution relating to source noncompliance" from consideration under 50.14. Our review teams are aware of this requirement and offer the following statements of compliance for the affected facilities:

On September 3, 2017, Antelope Coal Mine's (Antelope) 6 Site TEOM recorded a PM₁₀ concentration of 196.1 µg/m³. Antelope began noticing high concentrations in the morning hours of September 1, 2017. Antelope noticed that a strong inversion layer had forced the wildfire smoke to ground level. On September 1, 2017 operational shutdowns began, with complete shutdown and partial shutdown sustained through the afternoon of September 4, 2017. As detailed in the Exceptional Event package Antelope curtailed production while leaving their water trucks in operation to reduce the amount of particulate generated at the mine. These actions reduced the amount of particulate generated from the mine, however high readings continued to be recorded at Site 6 from September 1-4, 2017. Past ambient monitoring data has shown that Antelope is consistently able to achieve compliance with the ambient standards even with the mine in full production. Antelope was operating in compliance with the conditions of their air quality permit during this exceptional event and the mine's expected contribution to the ambient exceedance was less than normal due to curtailed production.

The Black Thunder Mine is inspected annually by compliance staff. The mine was inspected on July 26, 2016 and on July 27, 2017. No Compliance issues were discovered during these inspections. During each of these inspections it was noted that air quality permits and requirements were being adhered to. Therefore, there is no reason to believe that this facility would not be in compliance with any air quality requirements at the time of this exceedance.

The North Antelope Rochelle Mine (NARM) is inspected annually by compliance staff. This mine was last inspected on August 29, 2018. Before this, the facility was inspected on August 24, 2017. In both cases it was determined that this facility was in compliance with all air quality requirements. Inspection reports were written after each inspection was conducted. A compliance checklist showing the compliance status with each permit condition for Air Quality Permit P0021831 was included in each of these reports. During each inspection, a reports and notifications review, a records review, and a site

inspection were performed. No compliance issues were found. Therefore, at the time of these PM₁₀ exceedances, there is no reason to believe that NARM would not have been in compliance with all air quality requirements.

The Rawhide Mine (Rawhide) is inspected annually by compliance staff. This mine was last inspected on August 9, 2018. Before this, the facility was inspected on August 9, 2017. In both cases it was determined that this facility was in compliance with all air quality requirements. Inspection reports were written after each inspection was conducted. Compliance checklists showing the compliance status with each permit condition for Air Quality Permits MD-212, MD-394A, and MD-703 were included in each of these reports. During each inspection, a reports and notifications review, a records review, and a site inspection were performed. No compliance issues were found. Therefore, at the time of the PM₁₀ exceedances addressed by this exceptional events packet, there is no reason to believe that Rawhide would not have been in compliance with all air quality requirements.

The AQD has flagged the PM_{2.5} and PM₁₀ data in exceedance of the NAAQS from September 1, 2017 through September 15, 2017 in EPA's Air Quality System's (AQS) data base. The AQD is requesting EPA to exercise its discretion and concur with the flags placed on the September 2017 exceedances.

In 2019, Cara Keslar participated in the EPA's State Planning Electronic Collaboration System (SPeCS) project team to provide feedback on development for Exceptional Event submissions. At this time, the AQD is awaiting EPA's full implementation of SPeCS for Exceptional Events. Until such time, the AQD will continue to submit demonstrations to EPA Region VIII via hard copy or electronic copy on portable drive.

If you have any questions, please feel free to contact Cara Keslar at (307) 777-8684.

Sincerely,



Darla J. Potter
Air Quality Resource Program Manager
Air Quality Division

[Enclosures]

CC: Richard Payton, U.S. EPA Region VIII (w/o enclosure)
Cara Keslar, WDEQ-AQD Monitoring Section Supervisor (w/o enclosure)
Tanner Shatto, WDEQ-AQD District 3 Engineer (w/o enclosure)
Phil Dinsmoor, Peabody Energy, (w/o enclosure)
Lecia Craft, Thunder Basin Coal Company (w/o enclosure)
Allen Wellborn, Antelope Coal Company (w/o enclosure)
Barkley Sive, NPS-ARD (w/o enclosure)